MODEL OR END ITEM	NEXT ASSY	MODULE OR SER NO. / GAEC SCH NO.	REQD PER MODULE OR END ITEM
LEM	LDW390-21296	MSC LAB (1548) SEE NOTE 20	1
PART NO. LDW300-21806-7			

MODEL OR END ITEM	NEXT ASSY	MODULE OR SER NO. / GAEC SCH NO.	REQD PER MODULE OR END ITEM
LEM	LDW390-21056	FMES	2
		DMSM	1
		LMS-2	2
		LMS-1	2
LEM	LDW390-21056	MIT. LAB SEE NOTE 17	2
PART NO. LDW300-21806-5			

MODEL OR END ITEM	NEXT ASSY	MODULE OR SER NO. / GAEC SCH NO.	REQD PER MODULE OR END ITEM
LEM	LDW390-21056	CRIT ENVIR TEST	2
LEM	LDW390-21056	LTA-1 (11)	2
PART NO. LDW300-21806-1		34	

6

SH REV STATUS: FOR DESCRIPTION OF REV SEE SUBQ SH								
SHEET	1.00	1.10	2.00	2.01	2.02	2.03	2.04	3.00
REV	D	C	D	D	D	D	D	D
SHEET		1.11						
REV		D						
SHEET								
REV								

LAST SECT LTR USED	M
LAST DASH NO. USED	-9

GRUMMAN REL INFO
PRIM NO. (1003)
257 MP-C 426-6

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
TOLERANCE UNLESS SPECIFIED
FRACTIONS - DECIMALS - ANGLES
± 1/64 ± .010 ± 1/2°

ORIG DWG AUTH
DETAIL SPEC REQUIREMENT
CLASS II ENGRG CHANGE
CLASS I ENGRG CHANGE

CONTRACT NO. NAS 9-1100 | LINE ITEM 2 | DOCUMENTATION TYPE II

DRAWN BY	G. KAMMERER 10/26/65
LAYOUT BY	G. KAMMERER 10-1-65
CHECKED BY	J. OTERO
GRP LDR	[illegible] 10/27/65
STRUCTURES	[illegible] 11/4
STRUCTURES	[illegible] 11-5
WEIGHTS	J. Ralls 10-28-65
RELIABILITY	[illegible]
PROJ ENGR	[illegible] 11/10
REL GROUP	[illegible] 11/10/65

GRUMMAN AIRCRAFT ENGRG CORP
BETHPAGE, L. I., NEW YORK

CONTROLLER (MECH ASSY)
STABILIZATION & CONTROL
TRANSLATION

SIZE	CODE IDENT NO.		
B	26512	LDW300-21806	D
SCALE	NONE	SHEET 1.00 OF 9	

ENG 77.1 9-64

01

NAS 9-1100

REVISIONS

CHANGE LTR	ITEM NO.	SHEET NO.	ZONE	SH CHG LTR	GRUMMAN INFO ONLY	DET SPEC	CLASS I	CLASS II	ENGRG ORDER	DESCRIPTION	EFFECTIVITY	DISPOSITION OF EXISTING PARTS: REWORK	DISPOSITION OF EXISTING PARTS: SCRAP	CHANGED BY AND DATE	ENGRG APPD	APPD
A	1	1.00, 1.10								SHEET 1.00 OF 7 WAS 1.00 OF 6, ADDED SHEET 1.10	NOT REQD				JAO 3-21-66	
	2	3.00 2.00	12B 7C 7A 10B 8C							IN F/D ONLY: FBJ10TF16A9 WAS FBJ10T16A9, LDW300M11818-1 REF WAS H4-2092 REF, LDW300-21801-5 WAS LDW300-21801-5 REF, LDW300-21803-1 WAS LDW300-21803-3. REVERSED DIRECTION OF HDWRE. ON LDW300M11869-3. ADDED LDW300-21805-1 TO B/M	NOTED	NOT	REQD	G. KAMMERER 3/15/66		
	3	2.00, 2.01 2.02, 2.03 3.00	10C 8C 7A, 5B 7B, 9B							IN F/D & B/M: LDW300M11817-1 WAS LDW300M11870-1, LDW300M11816-1 WAS LDW300M11864-1, MS28774-009 (2) WAS MS28775-010, DELETED LDW300P11805-1, NAS513-5 WAS LDW300M11879-1, ADDED AN960D1416L, MS21265-A3T, AN936A416. LDW300M11875-3 WAS LDW300M11875-1		✓				
	4	3.00	4C 10A 4A 6A 9C							IN DET L, 6.344 (REF) WAS 6.338; IN VIEW D-D, 66° ± 2° WAS 66° ± 1°; IN VIEW E-E, 28° ± 2° (REF) WAS 28°; ADDED NOTE 14 & 15, LDW300M11872-5 (REF), WAS LDW300M11872-1 (REF); IN NOTE 10, 4 ± ½ WAS 6½ ± ½; IN NOTE 11B, 1½ ± ½ WAS 1 - 1½. ADDED LDW300P11807-5 (2)				P. KALLIN 21 MARCH 1966		
	5	1.00, 2.00 2.01, 2.02 2.03, 3.00	7A 8B 8C							IN F/D, B/M & MOD BLK, CREATED -5 BY ADDING LDW300-21801-11, LDW300-21802-7, LDW300-21803-7 EFF ON M.I.T. LAB, LMS-1, -2, DMSM, FMES. RESTRICTED -1 TO LTA-1 & CRIT ENVIR. TEST. (15)					FEB	
B	1	1.00, 1.10, 2.00, 2.01 2.02 & 3.00							EO B1	ON-1 & -5: IN B/M, LDW300-21803-1 & -21803-7, QUAN 2 WAS 1, AN960D416L, QUAN 2 WAS 1, ADDED "SEE NOTE 16" IN FLD. & B/M. LDW300-21805-1 & LDW300M11866-3. RESTRICTED TO -1, LDW300-21805-3 & LDW300M11866-5. ADDED TO -5, IN VIEW A-A, ADDED LDW300-11825-1 (REF.). IN SECTION H-H ADDED AN960D416L (SEE NOTE 16). IN VIEW E-E, LDW300M11823-1 (SEE NOTE 3 & 10) WAS (SEE NOTES 3 & 12). ADDED NOTES 16 & 17. IN MOD. BLK. M.I.T. LAB (SEE NOTE 17) WAS (SEE NOTE 1).	M.I.T. LAB (SEE NOTE 17), CRIT. ENVIR. TEST, LTA-1 (11), DMSM, LMS-1-2, & FMES	✓		F. PEPE 6/16/66		
	2	1.00, 2.03 & 3.00							EO B2	ON-5: ADDED LDW300-11827-1, DELETED AT-240-1.						
	3	3.00							EO B3	ON-1 & -5: NOTE 10: "STARTING AT 51°-54°" WAS "STARTING AT 51° ± 1° & ENDING AT 56° ± 1°". IN FLD, VIEW DD: 51°-54° WAS 51 ± 1°. NOTE 14c: (51°-54° THROTTLE POSITION) WAS (51° THROTTLE POSITION), "1.42-1.65 VOLTS" WAS "1.42-1.60 VOLTS". NOTE 14, ADDED, "OR LDW902-10002".						
C	1	1.00, 1.01, 2.01 & 3.00							EO C1	ON-5: ADDED NOTE 18. IN SECTION K-K & B/M FOR PART NO. LDW300M11861-1 ADDED (SEE NOTE 18).	M.I.T. LAB, LMS-1 & -2, DMSM, FMES.	NOT	REQD	7/7/66	JAO	

FOR CONTINUATION OF REVISIONS SEE SHEET 1.11

S 77.3 5-64

GRUMMAN AIRCRAFT ENGRG CORP, BETHPAGE, L. I., NEW YORK

SIZE	CODE IDENT NO.		
B	26512	LDW300-21806	C
SCALE NONE			SHEET 1.10

01

NAS 9-1100

REVISIONS

CHANGE LTR	ITEM NO.	SHEET NO.	ZONE	GRUMMAN INFO ONLY	DET SPEC	CLASS I	CLASS II	ENGRG ORDER	DESCRIPTION	EFFECTIVITY	DISPOSITION OF EXISTING PARTS: REWORK	DISPOSITION OF EXISTING PARTS: SCRAP	CHANGED BY AND DATE	ENGRG APPD	GOVT APPD
		1.00, 1.11, 2.04							SH 1.00 OF 9 WAS SH 1.00 OF 7 ADDED SH 1.11 & SH. 2.04						
C	2	1.00, 2.00, 2.01, 2.02, 2.03, 2.04, 3.00							CREATED -7 & -9 ASSY. ADDED LDW300-11831-11, LDW300-21801-15, -21802-11, -21803-9, -21804-5, LDW300M11814-3, M11825-3, M11854-3, M11855-3, M11856-3, M11864-1, M11870-1, M11885-3, M11906-1, M11907-1, LDW300P11800-3, LSC300-18100-03-01, LSC360-700-3, NAS1132V5, NAS1198-3-9. ADDED VIEW "M-M". ADDED NOTES 19, 20 & 21.	M.S.C. LAB (1 & SUBQ) (SEE NOTE 20)	✓		F. PEPE 7/15/66		
	3	3.00							IN ZONE 9B (SEE NOTE 4) WAS (SEE NOTE 6). ON TABLE, THROTTLE SOFT STOP 3½ -7 LBS, 4-8 LBS WAS 4 ± ½ LBS, 5½ ± ½ LBS. DELETED DETAIL "L". IN NOTE 7B DELETED "CHECK X-AXIS JET MODE THROWS OF 4 ¾ ± ½° AS INDICATED IN DETAIL "L". NOTE THAT GUIDE LDW300M11866 ACTS AS A STOP WITHIN CAVITY WALLS OF LDW300M11860." ADDED" NOTE THAT THE X-AXIS...ETC. IN NOTE 7C DELETED FIRST SENTENCE	NOT REQ'D	NOT	REQ'D			
	4	1.00							ON -1 MOD. BLK. FOR CRIT. ENVIR. TEST QUAN (2) WAS (3) -1 MAY BE REWORKED TO MAKE -7.	NOTED	NOTED				
D	1	1.00, 2.00 2.01, 2.02 2.03, 3.00							ON -1 & -5 MOD. BLK. N/A LDW390-21056 WAS LDW300-21800. ON -7 MOD. BLK. N/A LDW390-21296 WAS LDW300-21800. ON B/M & FLD. MS20470AD4-20 WAS MS20470AD4-18, LDW300-28813-1 WAS LDW300-28805-3, LDW300M11916-1 WAS LDW300M11907-1, RESTRICTED LDW300M11823-1 TO -1 & -5 ASSY. ONLY, LDW300M11855-1 TO -3 ASSY ONLY, LDW300M11855-3 TO -9 ASSY ONLY, LDW300M11866-5 TO -5 ASSY ONLY, LDW300M 11852-3 TO -3 & -9 ASSY ONLY, ADDED LDW300M11866-7 & LDW300M11913-1 TO -7 ASSY ONLY. ON FLD (ZONE C12) OVERLAP .040 WAS .020 (ZONE C11) DELETED ".010 MIN. CLEARANCE CAM TO HOUSING (SEE NOTE 19)", (ZONE B12) DELETED "GAP (.003-.005) (SEE NOTE 6)". ON NOTE 12A "1½ FULL TURNS" WAS "ONE (1) FULL TURN" & "2 AFTER ROLLER" WAS "1½ AFTER ROLLER". ON NOTE 19 ".035-.045 INCHES" WAS ".015-.025 INCHES", "THE OVERLAP BETWEEN" WAS "THE CLEARANCE BETWEEN" & "TO BE MORE THAN .060 INCHES" WAS "TO BE LESS THAN .010 INCHES". IN TABLE, THROTTLE SOFT STOP, 4½ ± ½ LBS. WAS 3½ -7 LBS, 5-7 LBS WAS 4-8 LBS. ADDED NOTE 22. ON B/M & FLD LSC360-700-3-2 WAS LSC360-700-3-1.	LTA-1(11), CRIT. ENVIR. TEST, M.I.T. LAB, LMS-1 & -2, DMSM, FMES, M.S.C. LAB (1 & SUBQ)	✓		F. PEPE 9/19/66		

FOR CONTINUATION OF REVISIONS SEE SHEET _____

GRUMMAN AIRCRAFT ENGRG CORP, BETHPAGE, L. I., NEW YORK

SIZE	CODE IDENT NO.		
B	26512	LDW300-21806	D
SCALE NONE			SHEET 1.11

ENG 77.3 5-65

0 1

NAS 9-1100

QTY PER ASSEMBLY -9	-7	-5	-3	-1	CODE IDENT	PART NO.	I&T	NOMENCLATURE OR DESCRIPTION	MATERIAL	GOVT SPEC	COML SPEC	STOCK SIZE	PROCESS SYM	FINISH NO.	ZONE
	1	1		1		LDW300-21807-3	E	SPRING ASSY	SEE DWG						9C
	1					LDW300-28813-1		BUNGEE-SOFT STOP							12C
		1				LDW300-21805-3		BUNGEE-SOFT STOP							5A
				1		LDW300-21805-1		BUNGEE-SOFT STOP							5A
	1					LDW300-21804-5		CAM ASSY							
		1		1		LDW300-21804-3		CAM ASSY							5A
	2					LDW300-21803-9		BUNGEE ASSY-X&Y AXIS							8C
		2				LDW300-21803-7		BUNGEE ASSY-X&Y AXIS							8C
				2		LDW300-21803-1		BUNGEE ASSY-X&Y AXIS							8C
	1					LDW300-21802-11		BUNGEE ASSY-Z AXIS							8B
		1				LDW300-21802-7		BUNGEE ASSY-Z AXIS							8B
				1		LDW300-21802-1		BUNGEE ASSY-Z AXIS							8B
	1					LDW300-21801-15		FRAME ASSY							7A
		1				LDW300-21801-11		FRAME ASSY							7A
				1		LDW300-21801-5		FRAME ASSY	SEE DWG						7A
	1					LDW300-21806-9		GIMBAL ASSY					NONE	NONE	
						LDW300-21806-7		CONTROLLER MECH ASSY							
						LDW300-21806-5		CONTROLLER MECH ASSY							
		1		1		LDW300-21806-3		GIMBAL ASSY							
						LDW300-21806-1	E	CONTROLLER MECH ASSY					NONE	NONE	

SYM OR NO.	PROCESS OR FINISH	GRUMMAN SPEC OR MILITARY SPEC	SYM OR NO.	PROCESS OR FINISH	GRUMMAN SPEC OR MILITARY SPEC	SYM OR NO.	PROCESS OR FINISH	GRUMMAN SPEC OR MILITARY SPEC

I & T: IDENTIFICATION AND TRACEABILITY IN ACCORDANCE WITH : NONE

GRUMMAN AIRCRAFT ENGRG CORP, BETHPAGE, L. I., NEW YORK

SIZE	CODE IDENT NO.		
B	26512	LDW300-21806	D

SCALE NONE SHEET 2.00

ENG 77.2 7-65

01

NAS 9-1100

-9	-7	-5	-3	-1	CODE IDENT	PART NO.	I&T	NOMENCLATURE OR DESCRIPTION	MATERIAL	GOVT SPEC	COML SPEC	STOCK SIZE	PROCESS SYM	FINISH NO.	ZONE
	1					LDW300M11866-7	E	GUIDE	SEE DWG						
	1					LDW300M11870-1		TERMINAL							10C
	1	1			1	LDW300M11869-3		FOLLOWER							10B
	1	1			1	LDW300M11868-3		DRIVER							10A
		1				LDW300M11866-5		GUIDE							6C
					1	LDW300M11866-3		GUIDE							6C
1			1			LDW300M11865-3		ARM							9C
1						LDW300M11864-1		TERMINAL							8C
	1	1			1	LDW300M11862-1		RETAINER							5B
	1	1			1	LDW300M11861-1		SHAFT (SEE NOTE 18)							6A
	1					LDW300M11856-3		LEVER							5C
		1			1	LDW300M11856-1		LEVER							5C
1						LDW300M11855-3		STUD							12B
			1			LDW300M11855-1		STUD							12B
	1					LDW300M11854-3		GUIDE							7C
		1			1	LDW300M11854-1		GUIDE							7C
1			1			LDW300M11852-3		SHAFT							7C
	1	1			1	LDW300M11851-1		SHUTTLE							9C
1						LDW300M11825-3		GIMBAL							8C
			1			LDW300M11825-1		GIMBAL							8C
		1			1	LDW300M11823-1		NUT							5A
		1			1	LDW300M11819-1		BEARING							7C
		1			1	LDW300M11817-1		TERMINAL							10C
			1			LDW300M11816-1		TERMINAL							8C
	1					LDW300M11814-3		BEARING							9A
	1					LDW300-11831-11		RETAINER							7B
		1				LDW300-11827-1		SWITCH							4B
	1	1			1	LDW300-11824-1		SPRING							7B
	1	1			1	LDW300-11818-3	E	SPRING	SEE DWG						6A

QTY PER ASSEMBLY

SYM OR NO.	PROCESS OR FINISH	GRUMMAN SPEC OR MILITARY SPEC	SYM OR NO.	PROCESS OR FINISH	GRUMMAN SPEC OR MILITARY SPEC	SYM OR NO.	PROCESS OR FINISH	GRUMMAN SPEC OR MILITARY SPEC

I & T: IDENTIFICATION AND TRACEABILITY IN ACCORDANCE WITH : NONE

GRUMMAN AIRCRAFT ENGRG CORP, BETHPAGE, L. I., NEW YORK

SIZE	CODE IDENT NO.		
B	26512	LDW300-21806	D

SCALE NONE SHEET 2.01

ENG 77.2 7-65

01

NAS 9-1100

			1	1		1		LDW300P11815-1	E	BEARING	SEE DWG							7C
			2	2		2		LDW300P11812-5		BUSHING								12A
			1	1		1		LDW300P11812-3		BUSHING								12A
			2	2		2		LDW300P11807-5		WASHER								9C
			1	1		1		LDW300P11807-1		WASHER								12B
				1		1		~~LDW300P11805-1~~		~~BEARING~~								
		1			1			LDW300P11803-3		BUSHING								7C
			1	1		1		LDW300P11802-1		BUSHING								7C
			1					LDW300P11800-3		BEARING								7B
			1					LDW300M11916-1		CAM								12C
			1					LDW300M11906-1		RETAINER								12C
			1	1		1		LDW300M11899-1		WASHER								11B
			3	3		3		LDW300M11898-1		DOWEL								8C 9C
			1	1		1		LDW300M11897-1		STOP								10B
			1	1		1		LDW300M11896-1		SHIM								10B
			1	1		1		LDW300M11890-1		NUT								9B
			1	1		1		LDW300M11889-1		BEARING								11A
			1	1		1		LDW300M11887-3		PIN								9C
			1	1		1		LDW300M11886-5		NUT								9B
		1			1			LDW300M11886-3		NUT								8C
		2	4	4	2	4		LDW300M11886-1		NUT								8C 10C
			1					LDW300M11885-3		SHAFT								9A
				1		1		LDW300M11885-1		SHAFT								9A
			1	1		1		LDW300M11883-1		KEY								6C
		2	2	2	2	2		LDW300M11882-1		STOP	(SEE NOTE 22)							8C
			1					LDW300M11913-1		NUT								
			1	1		1		LDW300M11881-1		TRUNNION								8B
			1	1		1		LDW300M11875-3		CAM								7A
			1	1		1		LDW300M11874-1		ADJUSTER								10B
			1	1		1		LDW300M11873-3	E	CAM	SEE DWG							10B
		-9	-7	-5	-3	-1	CODE IDENT	PART NO.	I&T	NOMENCLATURE OR DESCRIPTION	MATERIAL	GOVT SPEC	COML SPEC	STOCK SIZE	PROCESS SYM	FINISH NO.	ZONE	
		QTY PER ASSEMBLY																

SYM OR NO.	PROCESS OR FINISH	GRUMMAN SPEC OR MILITARY SPEC	SYM OR NO.	PROCESS OR FINISH	GRUMMAN SPEC OR MILITARY SPEC	SYM OR NO.	PROCESS OR FINISH	GRUMMAN SPEC OR MILITARY SPEC

I & T: IDENTIFICATION AND TRACEABILITY IN ACCORDANCE WITH : NONE

GRUMMAN AIRCRAFT ENGRG CORP, BETHPAGE, L. I., NEW YORK

SIZE	CODE IDENT NO.		
B	26512	LDW300-21806	D

SCALE NONE SHEET 2.02

ENG 77.2 7-65

01

NAS 9-1100

QTY PER ASSEMBLY					CODE IDENT	PART NO.	I&T	NOMENCLATURE OR DESCRIPTION	MATERIAL	GOVT SPEC	COML SPEC	STOCK SIZE	PROCESS SYM	FINISH NO.	ZONE
-9	-7	-5	-3	-1											
		1		1		MS28775-010		"O" RING	STD PART						6A
	4	4		4		MS28774-009	E	RETAINER	STD PART						6A
	7	7		7		MS24665-153		PIN-COTTER							6,7,8C 9A,8C
	1	1		1		MS21265-A3T		GROMMET							4B
	7	5		5		MS21042L08		NUT							10B
		1		1		MS20615-3M11		RIVET							6A
	1	1		1		MS20470-AD4									9A
2			2			MS20470-AD4-20									12B 8C
	2	2		2		MS20470-AD3									12B 11A
	1	1		1		MS20470-AD2		RIVET							10B
	1	1		1		AN960D1416L		WASHER							7B
		2		2		AN960D416L		(SEE NOTE 16)							7C 9A
		2		2		AN960C416L									7C
	1	1		1		AN960D10L									7C
	4	4		4		AN960D10									8C 9C 9A 10C
	7	5		5		AN960D8L									10B
	1	1		1		AN960D8									9C
	2	2		2		AN960D3L		WASHER							11A
	1	1		1		AN936A416		WASHER-LOCK							9B
	1	1		1		AN320C4		NUT							7C
	5	5		5		AN320C3		NUT							8C 9A 6C 8C
	1	1		1		AN320C2	E	NUT	STD PART						9C

SYM OR NO.	PROCESS OR FINISH	GRUMMAN SPEC OR MILITARY SPEC

SYM OR NO.	PROCESS OR FINISH	GRUMMAN SPEC OR MILITARY SPEC

SYM OR NO.	PROCESS OR FINISH	GRUMMAN SPEC OR MILITARY SPEC

I & T: IDENTIFICATION AND TRACEABILITY IN ACCORDANCE WITH : NONE

GRUMMAN AIRCRAFT ENGRG CORP., BETHPAGE, L. I., NEW YORK

SIZE	CODE IDENT NO.		
B	26512	LDW300-21806	D

SCALE NONE SHEET 2.03

ENG 77.2 7-65

01

NAS 9-1100

QTY PER ASSEMBLY -9	-7	-5	-3	-1	CODE IDENT	PART NO.	I&T	NOMENCLATURE OR DESCRIPTION	MATERIAL	GOVT SPEC	COML SPEC	STOCK SIZE	PROCESS SYM	FINISH NO.	ZONE
	1					LSC360-700-3-2	E	SWITCH	SEE NOTE 21						5B
				1	82647	AT240-1		SWITCH							5B
		2		2	21335	FBJ10TF16A9		BEARING							12B 9A
		1		1	80294	2022030101		TRANSDUCER							9B
	1					LSC300-18100-031		TRANSDUCER	SEE NOTE 21						
	1	1		1		NAS1204-13D		BOLT	STD PART						7C
	1	1		1		NAS1203-12D		BOLT							6C
	2	2		2		NAS1202-4		BOLT							10B
	1					NAS1198-3-9		RIVET							7A
	2					NAS1132V5		BOLT							12C
	3	3		3		NAS1122C2H		BOLT							10B
	1	1		1		NAS513-6		WASHER-LOCKING							9B
1	1	1	1	1		NAS513-5		WASHER-LOCKING							8C 9B
	1	1		1		NAS513-4		WASHER-LOCKING							10C
	1	1		1		NAS428H3-4	E	BOLT	STD. PART						7C

SYM OR NO.	PROCESS OR FINISH	GRUMMAN SPEC OR MILITARY SPEC	SYM OR NO.	PROCESS OR FINISH	GRUMMAN SPEC OR MILITARY SPEC	SYM OR NO.	PROCESS OR FINISH	GRUMMAN SPEC OR MILITARY SPEC

I & T: IDENTIFICATION AND TRACEABILITY IN ACCORDANCE WITH : NONE

GRUMMAN AIRCRAFT ENGRG CORP, BETHPAGE, L. I., NEW YORK

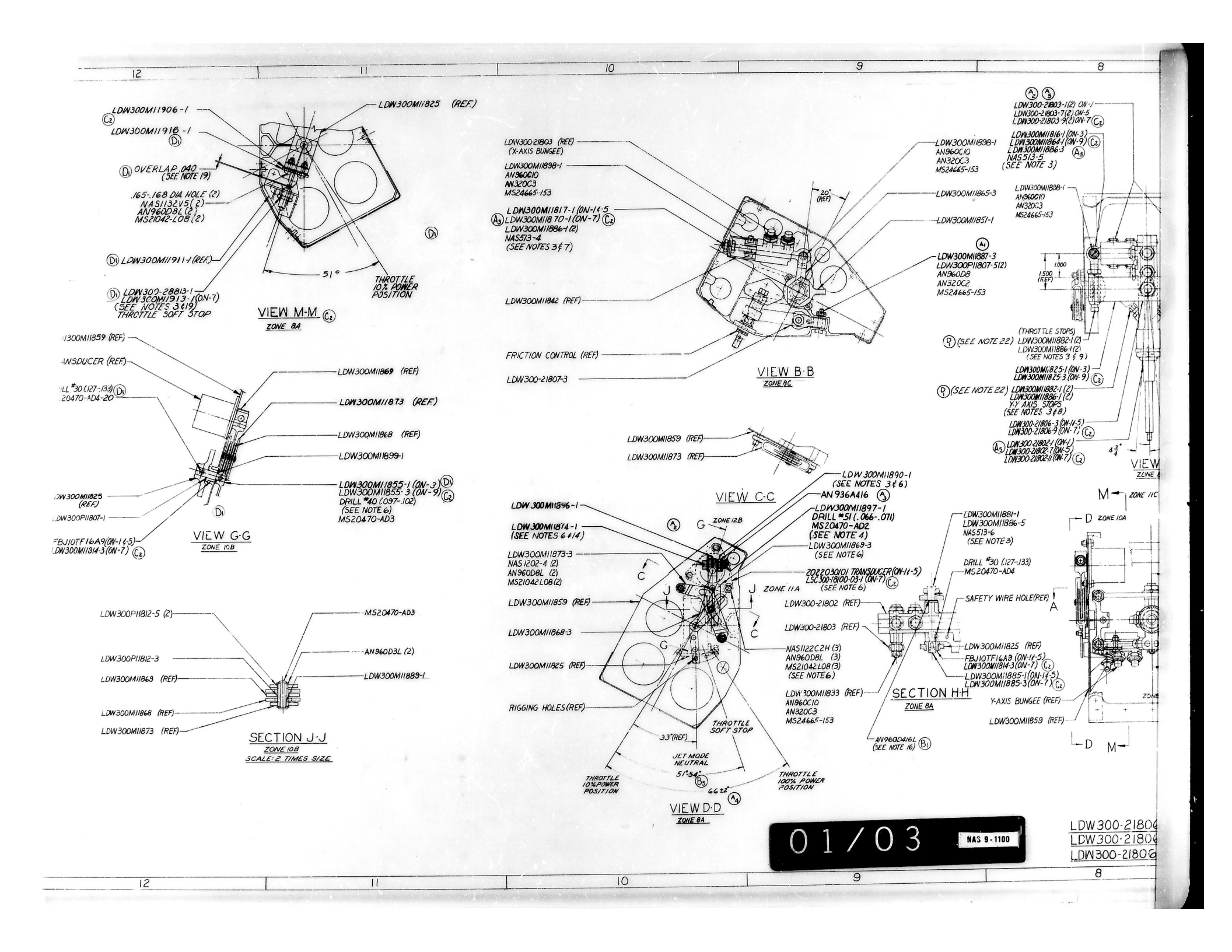
SIZE	CODE IDENT NO.		
B	26512	LDW300-21806	D

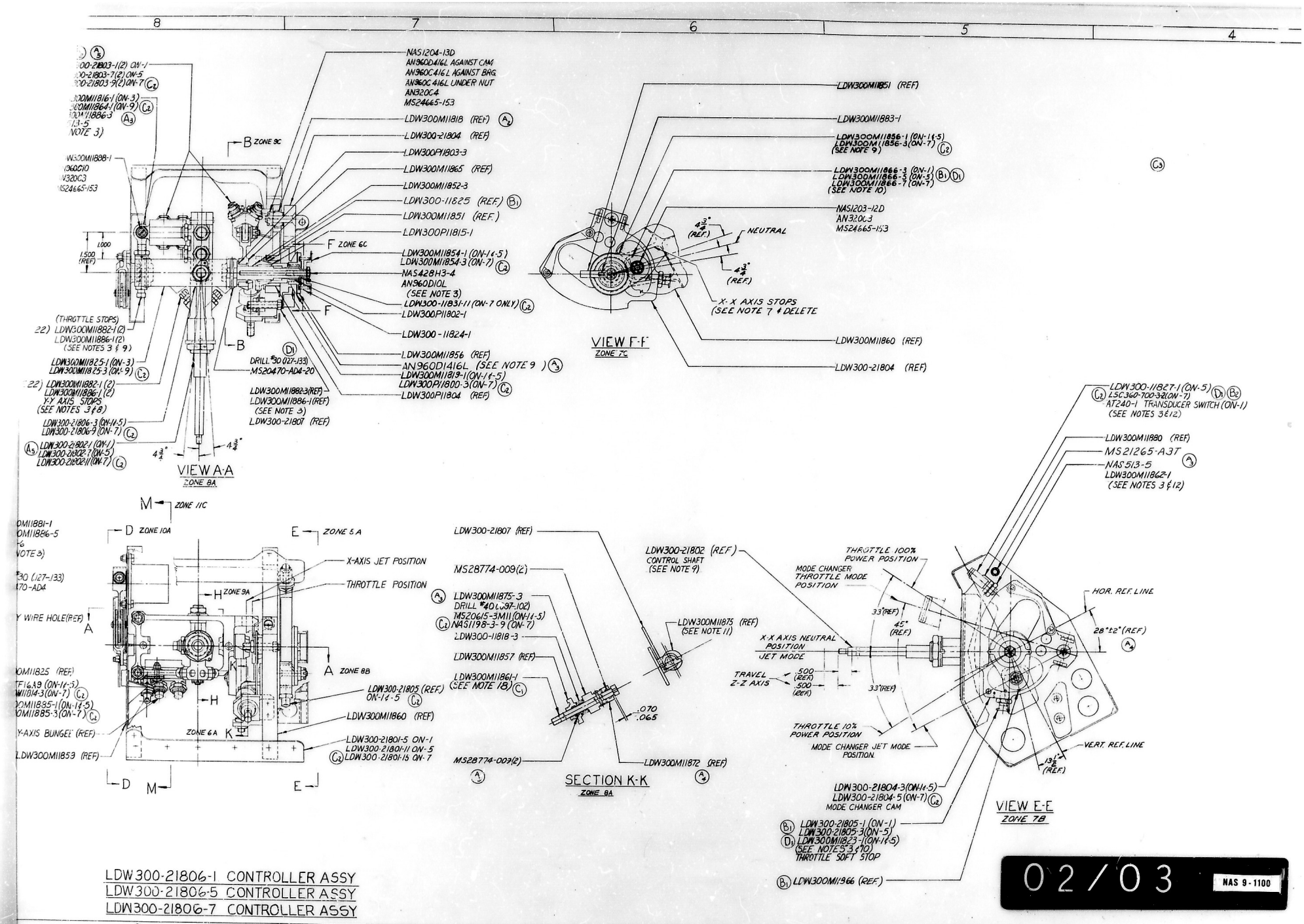
SCALE NONE SHEET 2.04

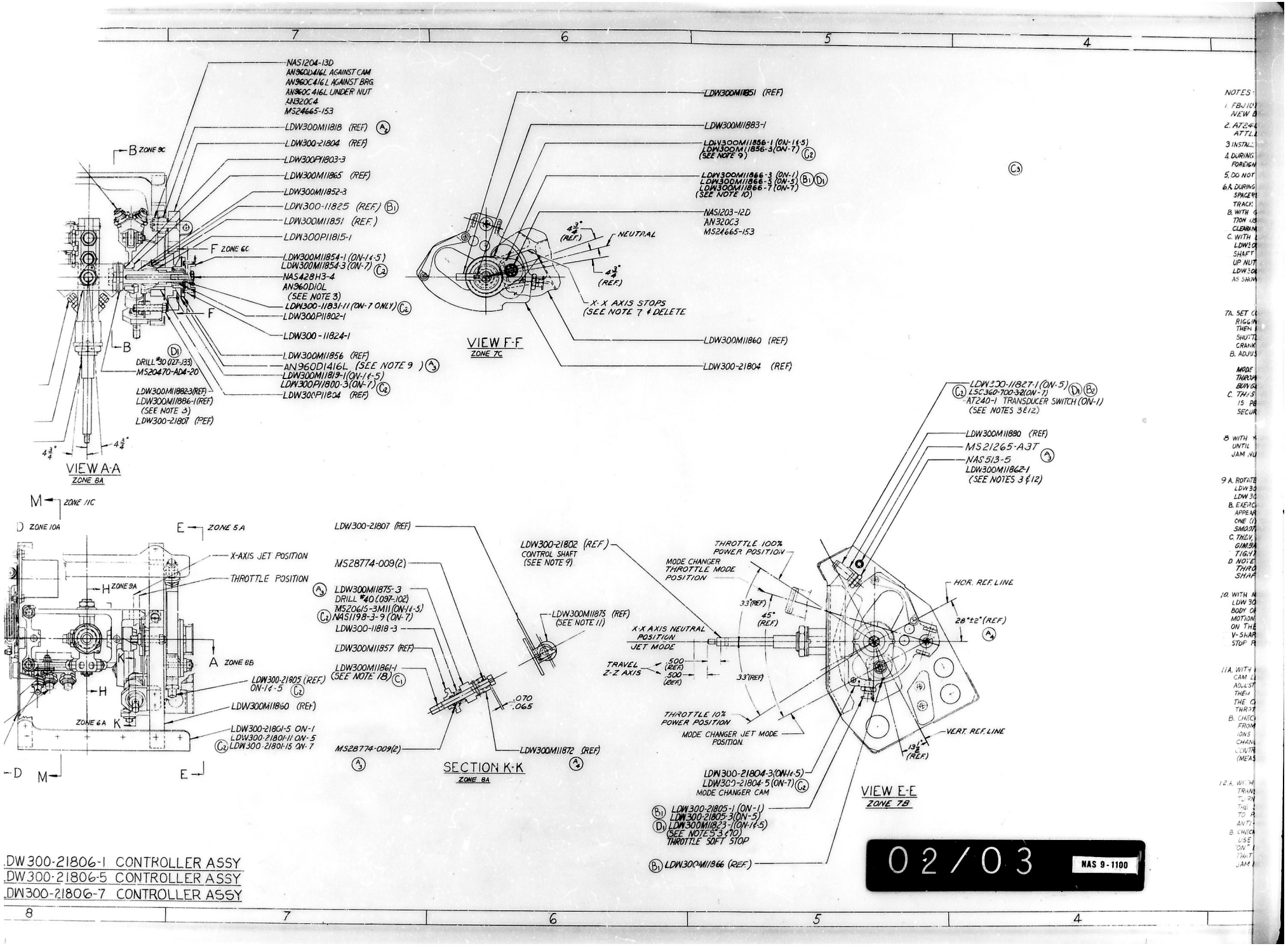
ENG 77.2 7-65

01

NAS 9-1100


LDW300M11906-1 (C2)
LDW300M11916-1 (D1)
LDW300M11825 (REF.)
D1 OVERLAP .040 (SEE NOTE 19)
.165-.168 DIA. HOLE (2) NAS1132V5 (2) AN960D8L (2) MS21042-L08 (2)
D1 LDW300M11911-1 (REF.)
D1 LDW300-28813-1 LDW300M11913-1 (ON-7) (SEE NOTES 3 & 19) THROTTLE SOFT STOP
51°
THROTTLE 10% POWER POSITION
VIEW M-M (C2)
ZONE 8A
LDW300-21803 (REF) (X-AXIS BUNGEE)
LDW300M11898-1 AN960C10 AN320C3 MS24665-153
LDW300M11817-1 (ON-1 & 5) (A3) LDW300M11870-1 (ON-7) (C2) LDW300M11886-1 (2) NAS513-4 (SEE NOTES 3 & 7)
LDW300M11842 (REF)
FRICTION CONTROL (REF)
LDW300-21807-3
20° (REF)
LDW300M11865-3
LDW300M11851-1
(A4) LDW300M11887-3 LDW300P11807-5(2) AN960D8 AN320C2 MS24665-153
VIEW B-B
ZONE 8C
(A2) (A3) LDW300-21803-1(2) ON-1 LDW300-21803-7(2) ON-5 LDW300-21803-9(2) ON-7 (C2)
LDW300M11816-1 (ON-3) LDW300M11864-1 (ON-9) (C2) LDW300M11886-3 (A3) NAS513-5 (SEE NOTE 3)
LDW300M11898-1 AN960C10 AN320C3 MS24665-153
1.000
1.500 (REF)
(THROTTLE STOPS) (P) (SEE NOTE 22) LDW300M11882-1 (2) LDW300M11886-1 (2) (SEE NOTES 3 & 9)
LDW300M11825-1 (ON-3) LDW300M11825-3 (ON-9) (C2)
(P) (SEE NOTE 22) LDW300M11882-1 (2) LDW300M11886-1 (2) Y-Y AXIS STOPS (SEE NOTES 3 & 8)
LDW300-21806-3 (ON-1 & 5) LDW300-21806-9 (ON-7) (C2)
(A3) LDW300-21802-1 (ON-1) LDW300-21802-7 (ON-5) LDW300-21802-11 (ON-7) (C2)
4 3/4"
VIEW
ZONE
M ZONE 11C
LDW300M11859 (REF)
LDW300M11873 (REF)
VIEW C-C
LDW300M11890-1 (SEE NOTES 3 & 6)
AN 936A416 (A3)
LDW300M11897-1 DRILL #51 (.066-.071) MS20470-AD2 (SEE NOTE 4)
LDW300M11869-3 (SEE NOTE 6)
2022030101 TRANSDUCER (ON-1 & 5) LSC300-1800-03-1 (ON-7) (C2) (SEE NOTE 6)
ZONE 11A
LDW300-21802 (REF)
LDW300-21803 (REF)
NAS1122C2H (3) AN960D8L (3) MS21042L08 (3) (SEE NOTE 6)
LDW300M11833 (REF) AN960C10 AN320C3 MS24665-153
AN960D416L (SEE NOTE 16) (B1)
SECTION H-H
ZONE 8A
LDW300M11881-1 LDW300M11886-5 NAS513-6 (SEE NOTE 3)
DRILL #30 (.127-.133) MS20470-AD4
SAFETY WIRE HOLE (REF)
LDW300M11825 (REF)
FBJ10TF16A3 (ON-1 & 5) LDW300M11814-3 (ON-7) (C2)
LDW300M11885-1 (ON-1 & 5) LDW300M11885-3 (ON-7) (C2)
Y-AXIS BUNGEE (REF)
LDW300M11859 (REF)
D ZONE 10A
ZONE
D M
LDW300M11859 (REF)
LDW300M11873 (REF)
LDW300M11825 (REF)
LDW300P11807-1
FBJ10TF16A9 (ON-1 & 5) LDW300M11814-3 (ON-7) (C2)
LDW300M11869 (REF)
LDW300M11868 (REF)
LDW300M11899-1
LDW300M11855-1 (ON-3) (D1) LDW300M11855-3 (ON-9) (C2) DRILL #40 (.097-.102) (SEE NOTE 6) MS20470-AD3
VIEW G-G
ZONE 10B
LDW300P11812-5 (2)
LDW300P11812-3
LDW300M11869 (REF)
LDW300M11868 (REF)
LDW300M11873 (REF)
MS20470-AD3
AN960D3L (2)
LDW300M11889-1
SECTION J-J
ZONE 10B
SCALE: 2 TIMES SIZE
LDW 300M11896-1
LDW300M11874-1 (SEE NOTES 6 & 14)
LDW300M11873-3 NAS1202-4 (2) AN960D8L (2) MS21042L08 (2)
LDW300M11859 (REF)
LDW300M11868-3
LDW300M11825 (REF)
RIGGING HOLES (REF)
ZONE 12B
ZONE 11A
THROTTLE SOFT STOP
3.3° (REF)
JET MODE NEUTRAL
51°54'
66°12'
THROTTLE 10% POWER POSITION
THROTTLE 100% POWER POSITION
VIEW D-D
ZONE 8A
01/03
NAS 9-1100
LDW300-21806
LDW300-21806
LDW300-21806


VIEW A-A
ZONE 8A
VIEW F-F
ZONE 7C
SECTION K-K
ZONE 8A
VIEW E-E
ZONE 7B
LDW300-21806-1 CONTROLLER ASSY
LDW300-21806-5 CONTROLLER ASSY
LDW300-21806-7 CONTROLLER ASSY
02/03
NAS 9-1100



LDW300-21806-1 CONTROLLER ASSY
LDW300-21806-5 CONTROLLER ASSY
LDW300-21806-7 CONTROLLER ASSY

02/03

NAS 9-1100

NOTES:

1. FBJ 10TF16A9 BEARINGS MAY BE PURCHASED FROM FAFNIR BEARING CO. NEW BRITAIN, CONN. (CODE IDENT. Nº 21335)
2. AT240-1 SWITCH MAY BE PURCHASED FROM METALS & CONTROLS, INC. ATTLEBORO, MASS. (CODE IDENT. Nº 82647)
3. INSTALL COTTER PINS AND/OR SAFETY WIRE IN ACCORDANCE WITH MS33540.
4. DURING ASSEMBLY AND/OR DISASSEMBLY, INSPECT TO INSURE THAT ALL BURRS, CHIPS, FOREIGN MATTER, GREASE OR OIL ARE REMOVED.
5. DO NOT USE GREASE OR OIL ON ANY COMPONENTS OF THIS CONTROLLER.
6. A. DURING ASSEMBLY OF TRANSDUCER CAM LDW300M11873 WITH DRIVER LDW300M11868 & SPACERS AS SHOWN IN SECTION J-J, CHECK FOR FREEDOM OF MOTION OF SPACERS IN CAM TRACK BEFORE & AFTER RIVETING. THE FIT SHOULD BE SNUG WITHOUT EVIDENCE OF BINDING.
   B. WITH GIMBAL ASSY LDW300-21806 & DRIVER LDW300M11868 RIGGED IN 10% THROTTLE POSITION USING A .125±DIA. RIGGING PIN, RIVET DRIVEN TO STUD LDW300M11865. ALLOW .003-.005 CLEARANCE BETWEEN DRIVER & WASHER LDW300M11889 BEFORE RIVETING.
   C. WITH LINKAGE STILL RIGGED IN 10% THROTTLE POSITION, INSTALL FOLLOWER LDW300M11869 BY SLIDING SLOTTED END OVER SPACER. THEN INSERT TRANSDUCER SHAFT INTO FOLLOWER HUB WHILE MOUNTING TRANSDUCER ON ITS SUPPORT PLATE. SNUG UP NUT LDW300M11890 & STOP LDW300M11897 AGAINST THE FOLLOWER UNTIL ADJUSTER LDW300M11874 CAN ROTATE WITHOUT BINDING OR END PLAY. RIVET STOP & ADJUSTER AS SHOWN IN VIEW D-D.

7. A. SET CONTROL SHAFT IN JET MODE NEUTRAL POSITION (28° ABOVE HORIZONTAL), WITH A RIGGING PIN INSERTED THROUGH LEFT PLATE LDW300M11859 & GIMBAL LDW300M11825. THEN ROTATE MODE CHANGER CAM LDW300-21804 TO THE JET MODE POSITION NOTING THAT SHUTTLE LDW300M11851 MOVES LATERALLY TO THE LEFT AND ENGAGES X-AXIS BUNGEE CRANK ARM LDW300M11865.
   B. ADJUST BUNGEE TERMINAL UNTIL SCREW ATTACHING BUNGEE CAN EASILY SLIP IN & OUT OF TERMINAL HOLE. NOTE THAT THE X-AXIS JET MODE THROWS ARE RESTRICTED BY THE CAVITY WALLS OF LDW300M11860. TO OBTAIN THROWS SYMMETRICAL WITHIN 1° OF EACHOTHER, REMOVE RIGGING PIN & READJUST BUNGEE TERMINAL UNTIL THROWS ARE WITHIN LIMITS.
   C. THIS REVISED JET MODE NEUTRAL POSITION IS PERMISSIBLE EVEN IF RIGGING PIN CAN NO LONGER BE INSERTED IN GIMBAL. SECURE FASTENERS, TIGHTEN JAM NUTS & SAFETY WIRE.

8. WITH Y-AXIS BUNGEE INSTALLED, ADJUST STOP BOLTS ON BUNGEE BODY UNTIL Y-AXIS JET MODE THROWS OF 4 3/4 ±1/2° ARE OBTAINED. TIGHTEN JAM NUTS & SAFETY WIRE.

9. A. ROTATE MODE CHANGER CAM TO THROTTLE MODE POSITION NOTING THAT SHUTTLE LDW300M11851 MOVES TO THE RIGHT UNTIL IT SEATS SNUGLY IN FRICTION RING LDW300P11804.
   B. EXERCISE CAUTION IN FIRST ROTATING CAM TO THROTTLE POSITION. IF HANDLING FORCE APPEARS HIGH AND CAM BINDS, IT WILL BE NECESSARY TO BACK OFF LEVER LDW300M11856 ONE (1) TURN. SHIM WITH AN960D416L (1) IF NECESSARY. RECHECK CAM ROTATION FOR SMOOTHNESS WITHOUT EVIDENCE OF BINDING.
   C. THEN, WITH CONTROL SHAFT RIGGED IN THE THROTTLE 10% POWER POSITION, ADJUST STOP BOLTS ON GIMBAL. REPEAT FOR THROTTLE 100% POWER POSITION. CHECK STOP TO STOP THROW OF 66° ±1°. TIGHTEN JAM NUTS BUT DO NOT SAFETY WIRE.
   D. NOTE THAT IN THROTTLE MODE & WITH CONTROL SHAFT AT ANY POSITION WITHIN THROTTLE RANGE, SHIFTING TO JET MODE WILL AUTOMATICALLY MOVE THE CONTROL SHAFT BACK TO JET MODE NEUTRAL POSITION.

10. WITH MODE CHANGER CAM IN THROTTLE MODE POSITION, ADJUST THROTTLE SOFT STOP LDW300-21805 UNTIL ITS PLUNGER HAS .007 TO .012 CLEARANCE WITH THE CIRCULAR BODY OF GUIDE LDW300M11866. SOFT STOP ACTUATION OCCURS DURING THROTTLE CONTROL MOTION STARTING AT 51°±4°. A FORCE OF (SEE TABLE) (MEASURED ON THE THROTTLE SHAFT AT 6 INCHES FROM THE PIVOT) IS REQUIRED TO MOVE THE V-SHAPED CAM OVER THE SPRING LOADED SOFT STOP PLUNGER. RE-ADJUST SOFT STOP POSITION IF NECESSARY. TIGHTEN JAM NUT & SAFETY WIRE.

11. A. WITH MODE CHANGER CAM IN THROTTLE MODE POSITION, ROTATE FRICTION CONTROL CAM LDW300M11875 UNTIL ITS MINIMUM RADIUS CONTACTS LEAF SPRING ASSY LDW300-21807. ADJUST STOP BOLT LDW300M11882 UNTIL IT CONTACTS MODE CHANGER CAM LDW300-21804, THEN TURN IT 1/4 TURN CLOCKWISE (LOOKING AT SLOTTED SHANK) TO PRESS IT AGAINST THE CAM. TIGHTEN JAM NUT AND CHECK OPERATION OF FRICTION CONTROL ON THE THROTTLE SHAFT.
   B. CHECK FRICTION CONTROL AT 45° ROTATIONAL INCREMENTS OF CAM LDW300M11875 FROM STOP TO STOP. MOVE THROTTLE HANDLE THROUGH FULL RANGE IN BOTH DIRECTIONS CHECKING FOR SMOOTH OPERATION WITHOUT EVIDENCE OF BINDING. NOTE THE CHANGE IN THROTTLE SHAFT HANDLING FORCE FOR EACH INCREMENT OF FRICTION CONTROL POSITION. ADJUST FRICTION CONTROL FOR AN INITIAL SETTING OF 1 1/2 ± 1/2 LBS. (MEASURED ON THROTTLE SHAFT AT 6 INCHES FROM PIVOT).

12. A. WITH MODE CHANGER CAM IN THE THROTTLE MODE POSITION, ADJUST THE TRANSDUCER SWITCH UNTIL ITS ROLLER CONTACTS THE TRACK OF THE CAM. TURN SWITCH UNTIL ITS ROLLER LIES IN THE PLANE OF THE CAM, THEN ROTATE THE SWITCH 1 1/2 FULL TURNS CLOCKWISE (ROLLER ALWAYS IN A PLANE PARALLEL TO PLANE OF CAM). TOTAL TURNS NOT TO EXCEED 2 AFTER ROLLER CONTACT. INSTALL ANTI-ROTATION LOCKWASHER NAS513-5 & JAM NUT (DO NOT TIGHTEN!).
   B. CHECK PROPER SWITCH ACTUATION BY ROTATING MODE CHANGER CAM TEN (10) TIMES. USE A VOLTMETER TO OBSERVE THE SWITCH ACTUATIONS. THE SWITCH SHOULD BE "ON" IN THE THROTTLE MODE POSITION & "OFF" IN THE JET MODE POSITION. NOTE THAT SWITCH ROLLER MOTION IS TO BE IN A PLANE PARALLEL TO CAM MOTION. TIGHTEN JAM NUT & SAFETY WIRE.

13. NOTE THAT IN SHIFTING FROM JET MODE TO THROTTLE MODE, A SLIGHT MOVEMENT OF THE THROTTLE SHAFT MAY OCCUR. THIS IS PERMISSIBLE AND DOES NOT AFFECT CONTROLLER OPERATION.

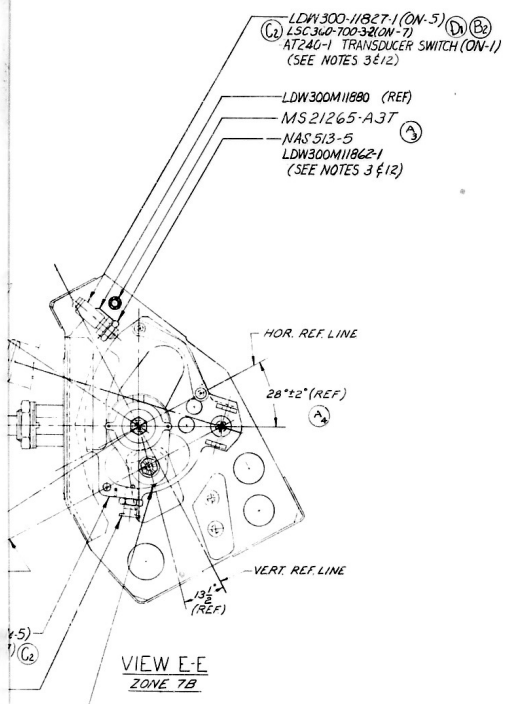
TRANSDUCER ADJUSTMENT

14. CONNECT TRANSDUCER INPUT WIRES (RED & BLACK) TO A & B TERMINALS, AND OUTPUT WIRES (YELLOW & BLUE ON 10-5) (WHITE & GREEN ON 7) TO C & D TERMINALS OF ELECTRICAL CONSOLE LSK 915-9003, OR LDW 902-1002. ALIGN NULL MARKS (SCRIBE LINES) ON TRANSDUCER SHAFT & BODY.
   A. WITH MODE CHANGER HANDLE IN THROTTLE MODE POSITION AND THROTTLE CONTROL SHAFT RIGGED IN THROTTLE 10% POWER POSITION (LOWER HARD STOP) AND ELECTRICAL POWER "ON," ADJUST SCREW LDW300M11874 CLOCKWISE (LOOKING AT SCREW SLOT) UNTIL THE VOLTMETER READOUT IS .54 ±.03 VOLTS (R.M.S.). TIGHTEN JAM NUT LDW300M11890 SECURELY TO LOCK THE TRANSDUCER SHAFT & FOLLOWER TOGETHER. EXERCISE CAUTION NOT TO DISTURB THE VOLTAGE SETTING.
   B. REMOVE RIGGING PIN AND MOVE THROTTLE CONTROL "UP" WHILE OBSERVING VOLTMETER. VOLTAGE MUST INCREASE IMMEDIATELY WITHOUT ANY FALL OFF WITH UPWARD MOTION OF THE THROTTLE CONTROL. IF VOLTAGE ACTION IS NOT CORRECT, READJUST THE TRANSDUCER COMPENSATING SCREW.
   C. ROTATE THE CONTROL SHAFT UPWARD & RIG AT THE SOFT STOP POSITION (51°±4° THROTTLE POSITION) AND VERIFY TRANSDUCER OUTPUT OF 1.42 -/+ .165 VOLTS (R.M.S.).
   D. REMOVE THE RIGGING PIN AND FORCE THE CONTROL SHAFT THROUGH THE SOFT STOP UNTIL IT BOTTOMS ON THE UPPER HARD STOP (100% THROTTLE POWER) AND VERIFY TRANSDUCER OUTPUT OF 3.0 ± .15 VOLTS (R.M.S.).
   E. IF VOLTAGE OUTPUTS ARE NOT WITHIN TOLERANCE, ROTATE THE CONTROL SHAFT BACK TO THE THROTTLE 10% POWER POSITION AND READJUST THE TRANSDUCER ADJUSTING SCREW TO RAISE OR LOWER THE VOLTAGE AS NECESSARY. PRECAUTIONS LISTED BEFORE SHALL AGAIN BE EXERCISED. REPEAT ALL VOLTAGE CHECKS AS BEFORE.
   F. ADDITIONAL ADJUSTMENTS MAY BE MADE BY RE-ADJUSTING THE THROTTLE HARD STOP BOLTS ON THE GIMBAL SO AS TO INCREASE OR DECREASE CONTROL SHAFT TRAVEL 2° MAXIMUM AT EITHER HARD STOP POSITION (TOTAL RANGE 64°±2°). THESE REVISED THROTTLE CONTROL TRAVELS ARE PERMISSIBLE EVEN IF RIGGING PIN CAN NO LONGER BE INSERTED IN GIMBAL AT HARD STOP POSITIONS.
   G. CYCLE THE THROTTLE CONTROL SHAFT FROM STOP TO STOP (FULL RANGE) AT LEAST 10 TIMES AND VERIFY FINAL VOLTAGE READINGS. SECURE ALL ADJUSTMENT FASTENERS WITH SAFETY WIRE IN ACCORDANCE WITH MS33540. DISCONNECT TRANSDUCER CABLE LEADS FROM POWER SOURCE.

15. DURING LINKAGE ADJUSTMENT TO ESTABLISH CONTROL HANDLE FORCES FOR THE THROTTLE SOFT STOP AND FRICTION CONTROL, USE A CALIBRATED SPRING SCALE (HAVING A 20 LB MAX. READING). PULL ON THE CONTROL SHAFT WITH THE SPRING SCALE MAINTAINED AT 6 INCHES FROM THE PIVOT AT 90° TO THE SHAFT & IN THE PLANE OF ROTATION. TAKE AVERAGE OF AT LEAST 3 READINGS IN BOTH DIRECTIONS FOR SETTING FRICTION AND IN "UP" DIRECTION ONLY FOR SOFT STOP SETTING.

CONTROL	NORMAL SETTING	CHECK POINT MAX. RANGE
THROTTLE FRICTION	1 1/2 ± 1 1/2 LBS.	3 ± 1/2 LBS.
THROTTLE SOFT STOP	4 1/2 ± 1/2 LBS	5 - 7 LBS.

16. WHEN THE GAP BETWEEN THE Z AXIS BUNGEE AND GIMBAL EXCEEDS .020 INCH, ADD SHIM WASHER AN960D416L TO ADJUSTABLE STUD AS SHOWN IN SECTION H-H.
17. DELIVER TO M.I.T. CAMBRIDGE, MASS., AS AUTHORIZED BY CCA 31 (LTR BG 54-65-97).
18. LDW300M11861-3 IS INTERCHANGEABLE WITH & MAY BE USED AS A REPLACEMENT FOR LDW300M11861-1.
19. WITH LINKAGE IN THE THROTTLE MODE, ROTATE THE GIMBAL SO THAT THE V-CAM & SOFT STOP BUNGEE PLUNGER ARE IN LINE. ADJUST THE BUNGEE UNTIL THE PLUNGER IS PUSHED IN .035-.045 INCHES BY THE V-CAM TEMPORARILY SECURE THE JAM NUT. RIG THE GIMBAL ASSY AT THE 51°±4° POSITION AND ADJUST THE V-CAM PLATE AS NECESSARY SO THAT THE CAM FACE TOUCHES, OR NEARLY TOUCHES THE SOFT STOP PLUNGER. ADJUST THE SOFT STOP BUNGEE AS NECESSARY TO OBTAIN THE FORCE LEVELS OF TABLE IN NOTE 15. UNDER NO CIRCUMSTANCES IS THE OVERLAP BETWEEN THE TIP OF THE V-CAM AND THE BUNGEE HOUSING TO BE MORE THAN .060 INCHES. WHEN THE THROTTLE SOFT STOP FORCE AND ANGULAR POSITION HAVE BEEN SATISFACTORILY DETERMINED, SECURE FASTENERS AND SAFETY WIRE.
20. AUTHORIZED BY CCA 237 (LTR BG 54-66-287).
21. COMMERCIAL PART, SEE SPEC CONTROL DWG BEFORE ORDERING.
22. LDW300M11882-5 IS INTERCHANGEABLE WITH LDW300M11882-1 & MAY BE USED FOR REPLACEMENTS OR SPARES.



VIEW E-E
ZONE 7B

TRANSLATION CONTROLLER ASSY

GRUMMAN AIRCRAFT ENGRG CORP
BETHPAGE, L. I., N. Y.
CODE IDENT NO. 26512 | SIZE J | LDW 300-21806 | D
LEW | MODEL | SCALE FULL | SHEET 3.00

03/03 NAS 9-1100

GRUMMAN AIRCRAFT ENGINEERING CORP.
CODE IDENT NO. 26512

ENG 32.1 REV 3-65

ENGINEERING ORDER

DWG NO. LDW300-21806 | EO NO. E1

*CONTROL INFO NO. LDW300-259

ADD(SEE NOTE *) TO LDW300M11856-1&-3(FIELD & B/M).

RESTRICT NAS1203-12D TO -1&-5 & DELETE FROM-7 (FIELD & B/M).
NAS1553V11D REPLACES NAS1203-12D ON-7(FIELD & B/M).

NOTE (ADD)

* LDW300M11856-3 & NAS1153V11D MAY BE USED AS REPLACEMENTS FOR LDW300M11856-1 & NAS1203-12D.

*- USE NEXT AVAILABLE NOTE NO 6

DETAIL SPEC REQ		CL II ENGRG CHG		CL I ENGRG CHG	

REASON FOR EO
TO ADD PARTS REPLACEMENT NOTE.
TO USE SHORTER BOLT.

DESCRIPTION OF EO
IN FLD. & B/M ADDED (SEE NOTE *)
TO LDW300M11856-1&-3. IN FLD. & B/M NAS1553V11D REPLACED NAS1203-12D
ON-7 & RESTRICTED NAS1203-12D TO -1&-5. ADDED NOTE *

GAEC EO RELEASE (P) 11/30

MODEL	EFFECTIVITY: PROCURING ACTIVITY NO.	GAEC UNIT NO.	SUB CONTR UNIT NO.
LM	M.I.T. LAB SEE NOTE *17	LMS-1	FMES
LM	CRIT. ENVIR. TEST	LMS-2	MSC LAB (I& SUBD) SEE NOTE #20
LM	LTA-1(11)	DMSM	

DRAWING CHANGE REQD: REVISE DWG	RECORD EO	DISPOSITION OF PARTS: REWORK	SCRAP
✓		✓	

PRIORITY: C

DRAWING TITLE: CONTROLLER (MECH. ASSY.)-STABILIZATION & CONTROL TRANSLATION

DRAWING NO.: LDW300-21806

EO NO.: E1

APPROVED BY									
	IAO			GJE	RC		RMC (11)	CH
DATE	11-22-66			11/22/66	11-22-66		11-22-66	11-29-66
CAT #	1		SUPPORT	RELIAB. GROUP	GROUP LEADER	STRESS GROUP	LIAISON ENGRG	PROJ ENGRG	GOVT

ISSUED BY FRANK PEPE x1671 11/21/66 SECTION GN&C GROUP NO. 300 PL 35

279

GRUMMAN AIRCRAFT ENGINEERING CORP.
CODE IDENT NO. 26512
ENGINEERING ORDER

ENG 32.1 REV 3-65

DWG. NO. LDW300-21806 | EO NO. E2
CONTROL INFO NO. LDW300-273

IN NOTE #15 CHANGE THROTTLE FRICTION NORMAL SETTING FROM 1½ ± 1½ LBS TO 1½ ± ½ LBS.

6

DETAIL SPEC REQ | CL I ENGRG CHG | CL II ENGRG CHG

REASON FOR EO: ENG'R ERROR

DESCRIPTION OF EO: IN NOTE #15, THROTTLE FRICTION NORMAL SETTING 1½ ± ½ LBS. WAS 1½ ± 1½ LBS

(E) GAEC EO RELEASE: E 12/30

MODEL	EFFECTIVITY: PROCURING ACTIVITY NO.	GAEC UNIT NO.	SUB CONTR UNIT NO.
LM	M.I.T. LAB	FMES	
LM	CRIT. ENVIR. TEST	DMSM	
LM	LTA-1(11)	LMS-1&-2	MSC LAB (SURF&)

DRAWING CHANGE REQD: RETIRE DWG ✓ | RECORD EO
DISPOSITION OF PARTS: NOT REQ'D REWORK | SCRAP
APPROVED BY: JAO | DATE: 12-8-66 | CAT. # 6
SUPPORT | RELIAB. GROUP | GROUP LEADER: 12/28/66 | STRESS GROUP: — | LIAISON ENGRG: — | PROJ ENGRG: 12/30

PRIORITY: C

DRAWING TITLE: CONTROLLER(MECH ASSY.) STABILIZATION & CONTROL TRANSLATION

DRAWING NO.: LDW300-21806

EO NO.: E2

ISSUED BY FRANK PEPE x1671 12/13/66 SECTION GN & C GROUP NO. 300 PL 35

01

NAS 9-1100

B

ENG 32.1 REV 3-65

GRUMMAN AIRCRAFT ENGINEERING CORP.
CODE IDENT NO. 26512
ENGINEERING ORDER

DWG. NO. LDW 300-21806 | EO NO. E3
CONTROL INFO NO. LDW 300-284

ADD NOTE # 24 TO FIELD OF LDW 300-21806

24. AN 960 D 8 WASHERS MAY BE USED BETWEEN LDW 300 M 11859 AND LSC 306-18100-03-1 TRANSDUCER TO PROVIDE PROPER CLEARANCE BETWEEN LDW 300 M 11869 AND LDW 300 M 11868 FOR LDW 300-21806-7 ASSEMBLY.

DETAIL SPEC REQ		CL. II ENGRG CHG	✓	CL. I ENGRG CHG	

6

REASON FOR EO	DESCRIPTION OF EO	GAEC EO RELEASE
TO PERMIT USE OF AN960-D8 WASHERS TO SHIM TRANSDUCER	ADD NOTE # 24	JK 3/23/67

MODEL	EFFECTIVITY: PROCURING ACTIVITY NO.	EFFECTIVITY: GAEC UNIT NO.	EFFECTIVITY: SUB CONTR UNIT NO.	DRAWING CHANGE REQD: REVISE DWG	DRAWING CHANGE REQD: RECORD EO	DISPOSITION OF PARTS: REWORK	DISPOSITION OF PARTS: SCRAP	APPROVED BY	DATE	SUPPORT	RELIAB. GROUP	GROUP LEADER	STRESS GROUP	LIAISON ENGRG	PROJ ENGRG
				✓		✓		JPK	3-13-67			JPE 3/17/67			pm 3-23-67
LM		MSC LAB #14508						CAT I							3-23-67

PRIORITY	DRAWING TITLE	DRAWING NO.	EO NO.
C	CONTROLLER (MECH ASSY) STAB & CONTROL - TRANSLATION	LDW 300-21806	E3

ISSUED BY J. KELLY 3-13-67 SECTION GN&C GROUP NO. 300 PL 25

01

NAS 9-1100

GRUMMAN AIRCRAFT ENGINEERING CORP.
CODE IDENT NO. 26512

ENG 32.1 REV 3-65

ENGINEERING ORDER

DWG. NO. LDW 300-21806 | EO NO. E4

CONTROL INFO NO. LDW 300 - 293

DELETE FROM B/M

LMS #1 & #2 EFFECTIVITY FOR LDW 300-21806-5 ASSEMBLY & LDW 300-21806-3 GIMBAL ASSEMBLY.

ADD TO FIELD & B/M FOR LMS #1 & #2

1. LDW 300-21806-11 ASSEMBLY (SAME AS LDW 300-21806-5 EXCEPT FOR ADDITION OF LDW 300-28813-1 SPRING ASSY & LDW 300M11913-1 NUT IN PLACE OF LDW 300-21805-3 SPRING AND LDW 300M11823-1 NUT.)

* -11 MAY BE MADE BY REWORKING -5

2. LDW 300-21806-13 GIMBAL ASSEMBLY (SAME AS LDW 300-21806-3 EXCEPT FOR THE ADDITION OF LDW 300M11906-1, LDW 300M11916-1, NAS1132V5(2) AN960 D8L(2), MS21042-L08(2)

3. DELETE LDW 300M11825-1 & ADD LDW 300M11825-3

* -13 MAY BE MADE BY REWORKING -3

DETAIL SPEC REQ		CL II ENGRG CHG		CL I ENGRG CHG	✓	LCO 2148	9-22-67

REASON FOR EO: INSTALL REVISED SOFT STOP IN LMS #1 & #2

DESCRIPTION OF EO: DELETE LDW 300-21806-5 & -3 AND ADD LDW 300-21806-11 & -13 FOR LMS #1 & #2

GAEC EO RELEASE: JK 9/26

MODEL	EFFECTIVITY: PROCURING ACTIVITY NO.	GAEC UNIT NO.	SUB CONTR UNIT NO.
LM	LMS #2		
LM	LMS #1		

DRAWING CHANGE REQD: REVISE DWG ✓ | RECORD EO

DISPOSITION OF PARTS: REWORK | SCRAP ✓

APPROVED BY					WM			RS	
DATE					9/18/67			9/19/67	9-26-67
			SUPPORT	RELIAB. GROUP	GROUP LEADER	STRESS GROUP	LIAISON ENGRG	PROJ ENGRG	

PRIORITY: C

DRAWING TITLE: CONTROLLER (MECH. ASSY.) STAB & CONT. - TRANSLATION

DRAWING NO.: LDW 300-21806

EO NO.: E4

ISSUED BY J. KELLY 1671 9-12-67 SECTION G-N & C GROUP NO. 300 PL 25